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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------|-------------|----------------------|---------------------|------------------|
| 10/713,425 | 11/17/2003 | Hong Gi Chun | 4547-0115P | 2726 |
| 2292 | 7590 | 02/24/2005 | | EXAMINER |
| BIRCH STEWART KOLASCH & BIRCH | | | | BHAT, ADITYA S |
| PO BOX 747 | | | | |
| FALLS CHURCH, VA 22040-0747 | | | ART UNIT | PAPER NUMBER |
| | | | 2863 | |

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|-----------------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/713,425 Examiner Aditya S. Bhat | CHUN, HONG GI Art Unit 2863 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 November 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,10-13 and 17-19 is/are rejected.
- 7) Claim(s) 2-9,14-16 and 20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 November 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/20/04.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Harman (USPN 5,446,4460).

A method of calibrating a system for detecting a location of a potential breach along a security fence, the method comprising the steps of:

providing a fiber optic cable along the security fence, with a light transmission and reception device attached to one end of the fiber optic cable; (Col.1, lines 60-63)

having a person move along the security fence, (Col.14, lines 9-10)

having the person interrupt light traveling through the fiber optic cable at a certain position; (Col.14, lines 6-17)

taking note of a ground distance between a reference point and the certain position; (Col.14, lines 6-17)

sensing the interruption in the fiber optic cable at the light transmission and reception device (Col.14, lines 6-17)

determining an associated cable length existing between the light transmission and reception device and the interruption in the fiber optic cable, and (Col.14, lines 6-17)

recording the ground distance and the associated cable length in a memory. (Col.14, lines 14-15)

With regards to claim 10, Harman (USPN 5,446,4460) teaches the transmission and reception device is an ODTR. (Refer to figure 13)

With regards to claim 11, Harman (USPN 5,446,4460) teaches the reference point is the start of the security fence. (Col. 14, lines 18-29)

With regards to claim 12, Harman (USPN 5,446,4460) teaches having the person interrupt light traveling through the fiber optic cable at different certain positions at different ground distances, in order to record a table of linked values of ground distances and associated cable lengths in the memory. (Col.14, lines 6-17)

With regards to claim 13, Harman (USPN 5,446,4460) teaches calibration system for calibrating a monitoring system for detecting a location of a potential breach along a security fence, the calibration system comprising:

a fiber optic cable ran along a security fence; (Col. 1, lines 60-63)

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a light transmission and reception device attached to one end of said fiber optic cable, (Col. 20, lines 58-60)

a controller attached to said light transmission and reception device; (see figure 1)

a first wireless communications device operated by a first person moving along the security fence, after the first person interprets light traveling through said fiber optic cable at a certain position, said first wireless communications device transmitting a ground distance from a reference point to the certain position, (Col. 14, lines 6-29)

a second wireless communications device receiving the ground distance from said first wireless communications device, (Col. 14, lines 6-29) and

a memory connected to said controller, wherein said light transmission and reception device in cooperation with said controller determines an associated cable length existing between the light transmission and reception device and the interruption in the cable, and wherein said controller stores the ground distance and the associate cable length in said memory. (Col. 14, lines 14-15)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Maki (USPUB 2005/0024210).

With regards to claim 17 Maki (USPUB 2005/0024210) teaches an operating method for a security fence monitoring system comprising.

constantly monitoring an output of a light transmission and reception device to determine a time delay of a light signal passing through a fiber optic cable attached to a security fence; (Page 1, paragraph 0012)

if the time delay varies outside of a threshold value, issuing an alarm signal, (Page 1-2, paragraph 0012)and

converting the time delay provided by the transceiver into a cable length value, (Page 4, paragraph 0037- 0038)

comparing the cable length value to a lookup table stored in a memory; (Page 4, paragraph 0037)

determining a zone of a potential breach point; (Page 1, paragraph 0012)and calculating an approximate location of the potential breach within the zone. (Page 1, paragraph 0012)

With regards to claim 18, Harman (USPN 5,446,4460) teaches the alarm signal causes activation of a visual or audible alarm device. (Page 1, paragraph 0005)

With regards to claim 19, Harman (USPN 5,446,4460) teaches wherein the alarm signal and the zone of the potential breach point are sent to a remote monitoring station. (Page 5, paragraph 0051)

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

Claims 2-9, 14-16 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2, 6- 7, 14-16, and 20:

The primary reason for the allowance of claim 2 is the inclusion of the method steps of: a second person receiving communications from the light transmission and reception device. It is this/these features found in the claim(s), as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this/these claim(s) allowable over the prior art.

The primary reason for the allowance of claim 6 is the inclusion of the method steps of: the second wireless communications device providing the ground distance to a controller, which stores the ground distance and the associated cable length in the memory. It is this/these features found in the claim(s), as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this/these claim(s) allowable over the prior art.

The primary reason for the allowance of claim 7 is the inclusion of the method steps of: connecting a second wireless communications device to the light transmission and reception device. It is this feature found in the claim, as they are claimed in the

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combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 14 is the inclusion of a: second wireless communication device is operated by a second person who inputs the ground distance into said controller. It is this feature found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 15 is the inclusion of a: second wireless communications unit is connected to said controller. It is this feature found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 16 is the inclusion of a: first wireless communications unit includes a global positioning system (GPS) unit to determine the ground distance from the reference. It is this feature found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 20 is the inclusion of a step of calculating the approximate location of the potential breach within the zone includes determining an average weave pattern density of the fiber optic cable for the zone. It is this feature found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claims 3-5 and 8-9 are allowed due to their dependency on claim 2.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pascale (USPN 5,198,799) teaches a opto-electronic security fence, Rich et al (USPUB 2004/0071382) teaches a fiber optic security sensor and system with integrated secure data transmission and power cables, Swanson et al. (USPN 6,731,210) teaches a system and method for detecting localizing or classifying a disturbance using a waveguide sensor system and Lannotti et al. (USPUB 2003/0151509) teaches a method and apparatus for detecting and destroying intruders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aditya Bhat
February 4, 2005

MICHAEL NGHIEM
PRIMARY EXAMINER